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FAIRBANKS

DIAL SCALES

FAIRBANKS, MORSE & CO.
(INCORPORATED)
Bulletin 135

IMPORTANT

This cover is a representation of the Fairbanks 15-inch Dial. By turning this card slowly to the left between "Start" and "Stop," the figures in the slots will be seen to change, successively increasing up to full capacity, exactly as in the scale itself.

The FAIRBANKS DIAL is
Direct Reading—Full Capacity

Fairbanks

Full Capacity *Direct Reading*

Dial Scale

The Most Highly Developed Machine of its Type for Modern Quick Weighing Service

TO CUT down the *time* and *labor* of weighing without loss of *accuracy* means a definite saving in dollars and cents every time a load comes on the scale. The thousands of weights taken each year in business houses of every kind make this item so serious that no business man can afford to stand by in doubt as to the real efficiency of his weighing methods.

The most valuable scale for any service is the one that gives accurate weights in the least time. To simply place a load upon the platform and *immediately read its correct weight from a plainly graduated dial,* is undoubtedly the closest approach imaginable to one hundred per cent weighing efficiency. It means the elimination of all calculations in the reading of the correct weight up to the full capacity of the scale. The only limit to the rate at which weighings can be made is the rate at which loads can be handled to and from the platform—the dial needs but a glance and the complete, accurate weight is easily read at once, even by the most inexperienced weighman.

The Fairbanks Dial Scale is the *logical* scale for every service requiring quantity weighing with speed and accuracy. It combines exclusive features that years of experience have proven to be of greatest advantage. It is built for practical everyday duty in a manner to successfully meet the needs of each user—to assure him the most efficient service in weighing his goods. Fairbanks Scales have justly earned their well-known reputation for reliability by over eighty-five years of faithful weighing. This assurance of quality is behind every Fairbanks Dial Scale—an undivided responsibility that brings to the purchaser the absolute confidence of always obtaining complete weighing satisfaction.

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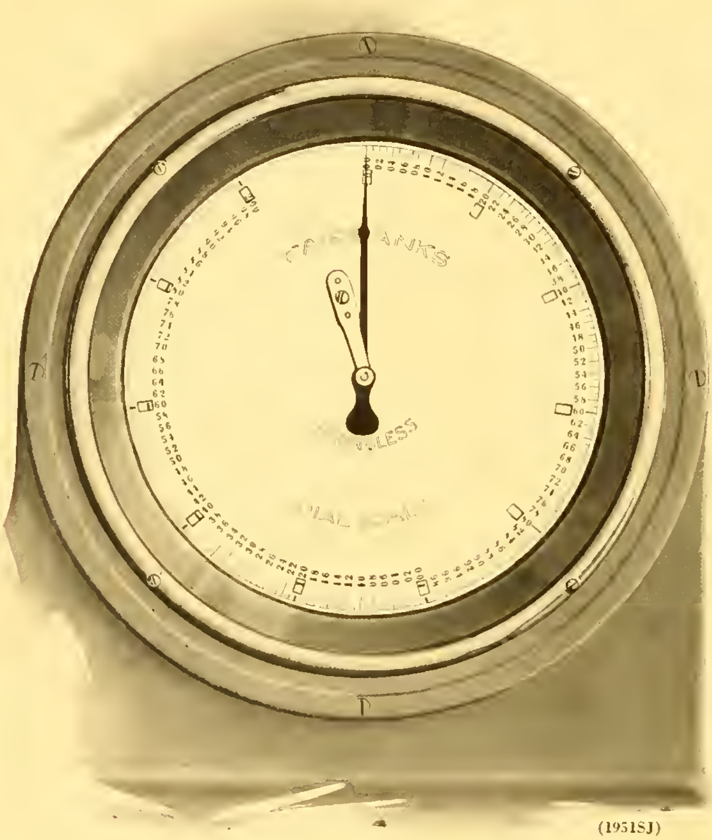
Fairbanks 15-inch Dial

Full Capacity—Direct Reading



(1951SJ)

Fairbanks 15-inch Dial, capacity, 2,000 by 1 lb.

MAY -3 1919
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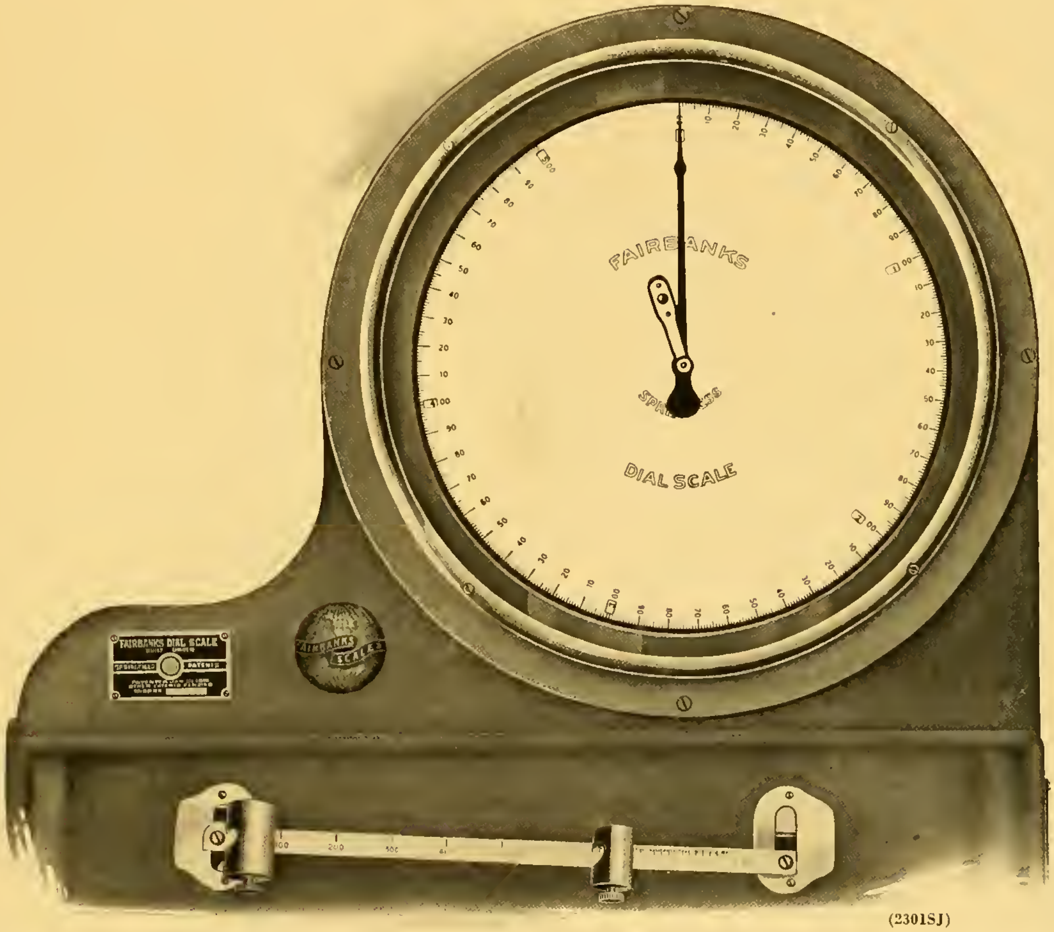
Fairbanks 20-inch Dial

Full Capacity—Direct Reading



(2301SJ)

Fairbanks 20-inch Dial, capacity, 5,000 by 1 lb.

A Simple Construction with Many Exclusive Features

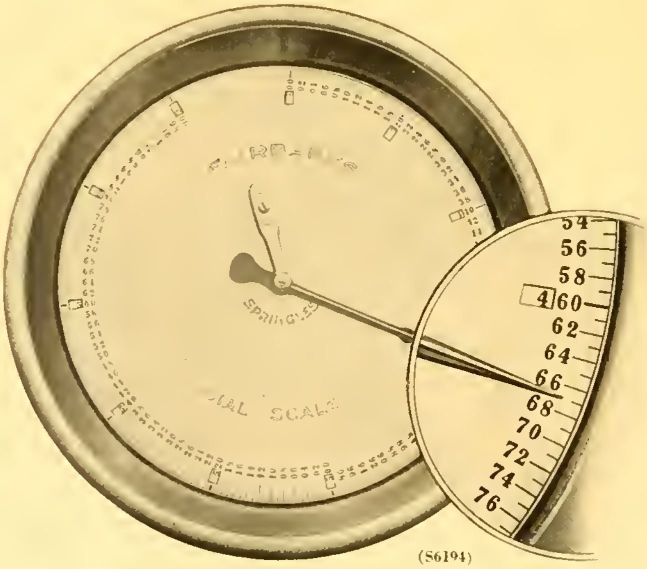
The Fairbanks Dial Scale follows, in general, the same principles that years of weighing experience have proven successful in the Fairbanks beam scale. It is in reality but a refinement of this well-known machine, the weights being read directly from a dial instead of from a beam. The construction is remarkably simple, *using no springs*, no complicated or delicate parts. A distinctive feature of this scale is the

Full Capacity Direct Reading Dial

which makes unnecessary any additions or calculations of any kind in the reading of the correct weight.

Two standard primary dials are furnished—15-inch with 200 graduations $\frac{1}{4}$-*inch apart*, and 20-inch with 500 graduations $\frac{1}{8}$-*inch apart*. Supplementing the graduated dial is the weight frame and counterpoise, carrying nine weights, each of which has the same value as the initial dial capacity, so that the total capacity of the indicator is ten times the capacity of the primary dial. Connected to the weight frame is a supplementary rotating dial arranged in such manner that when the weight frame descends, the rotating dial makes a proportionate part of a revolution. Through openings in the primary dial, the correct figures are then shown, to indicate the amount of weight deposited upon the counterpoise, which must be balanced upon the platform before the hand begins to travel around the dial.

When a load exceeding the initial dial capacity is placed upon the platform, the hand travels beyond the last graduation and comes to rest in the blank space, that position of the hand indicating to the operator the necessity for depositing one or more weights upon the counterpoise by pressing the button in the front of the case. The weight frame is entirely separate from and does not interfere with the weighing mechanism at any time. The pressing of the button merely releases the ratchet pawl permitting the frame with its weights to descend by gravity as far as necessary to deposit weights upon the counterpoise until the hand begins to move out of the



(S6194)

Fairbanks Dial, 2,000 lbs. capacity, as on page 2, but now with dial in position to indicate up to 600 lbs. by 1 lb.
Note magnified portion indicating clearly a direct reading of 467 lbs.

blank space. As soon as this is done, pressure on the button is released and the hand comes to rest at the figure showing the true weight of the load upon the platform.

Details of Construction

Scale Beam The Fairbanks Dial Scale is built along the lines of the ordinary beam scale, the beam being inside the case. Attached to this beam by means of lugs extending through slots in the case, is the graduated bar with poise *used only for taking tare* of trucks or other containers. This bar is set at an angle to be easily read from above. It offers also the further advantage of allowing hand weighing up to the full capacity of the dial, but is entirely independent of the dial. This construction thus permits of two accurate and independent systems of weighing.

Pendulums The principle of the *inclination balance* is employed to furnish the resistance necessary to counterbalance loads up to the initial capacity of the dial, the main pendulum being accurately sealed to the beam. In addition, the *compensating pendulum* provides a further safeguard against change of balance due to scale being out of level or dial mechanism out of plumb.

Shock Absorber Vibration of the indicator is effectively prevented by an oil shock absorber with aluminum plunger attached to the end of the beam. Ample clearance is allowed to avoid undue friction.

Shelf Lever Every Fairbanks Dial Scale is fitted with a slotted shelf lever to transmit the load from the lever system to the dial, by means of which the dial is easily adapted to the different types of scales.

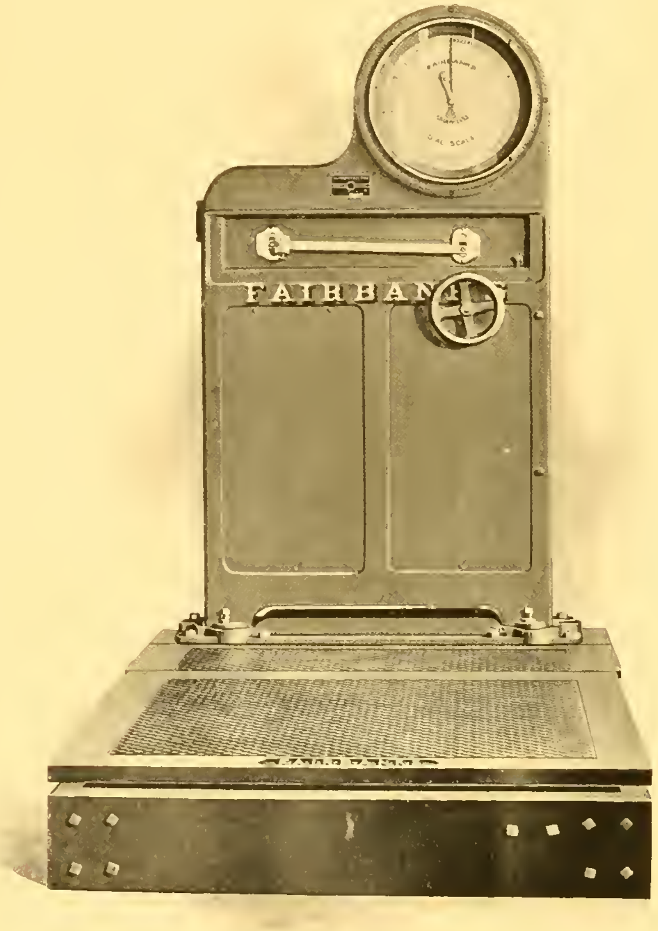
Case The iron case containing the dial parts is of exceptionally heavy and rigid construction, to insure permanent, correct relation of the dial mechanism to the scale levers. The tare beam extending across the front is set in a recess in the case, being thus protected from injury due to projecting loads.

Iron Base The base of the case has convenient leveling screws at both front and rear. This base rests upon a separate outer iron base, the latter being securely bolted to the foundation, the entire setting thus providing simple means for proper alignment.

Detail

The Fairbanks Dial is regularly furnished in six sizes, as listed on page 7, for use either with heavy duty scales, as required for freight and baggage service, or for regular warehouse duty as ordinarily found in business establishments. On account of its unique principle of obtaining full capacity on the dial, the scale may readily be made of any required capacity upon order, with dial and tare beam graduations to suit. The dial itself may be readily applied to any existing platform scale now in good working order.

Fairbanks Warehouse Dial Scale



(1949SJ)

Fairbanks Warehouse All-metal Self-contained Dial Scale, with Suspended Platform

Details

Fairbanks Dial

Code No.	Code Word	Dial Capacity	Tare Beam	Dial Size
10742	Octile	2,000 x 1 lbs	200 x 1 lbs.	15 in.
10762	Octylic	4,000 x 2 lbs.	400 x 2 lbs.	15 in.
10743	Octillion	10,000 x 5 lbs.	1,000 x 5 lbs.	15 in.
10764	Oculary	20,000 x 10 lbs.	2,000 x 10 lbs.	15 in.
10765	Oculate	40,000 x 20 lbs.	4,000 x 20 lbs.	15 in.
10791	Odorant	5,000 x 1 lbs.	500 x 1 lbs.	20 in.

While any of the self-contained warehouse scales or built-in scales are adapted for the Fairbanks Dial, those listed below are especially recommended for general service.

Self-contained Suspended Platform Scales with Spider and Removable Platform

Code No.	Code Word	Capacity	Platform
10080	Nonmember	5,000 lbs.	48 in. x 49 in.
10081	Nonmetal	3,500 lbs.	42 in. x 44 in.
10082	Nonnatural	2,500 lbs.	47 in. x 37 in.
10083	Nonoic	1,500 lbs.	43 in. x 34 in.

Heavy Duty Built-in Suspended Platform Scales

Code No.	Code Word	Capacity	Platform
2185	Hesper	4 tons	5 ft. x 4 ft. 6 in.
2153	Heptarch	4 tons	6 ft. x 4 ft. 8 in.
2175	Hermit	6 tons	6 ft. x 4 ft. 8 in.

Built-in Suspended Platform Scales

Code No.	Code Word	Capacity	Platform
10099	Nontoxic	4 tons	6 ft. x 4 ft.
10100	Nontronite	4 or 5 tons	8 ft. x 6 ft.
10101	Nonusance	4 or 5 tons	9 ft. x 7 ft.

Heavy Duty, Self-contained, All Metal Scale with Suspended Platform

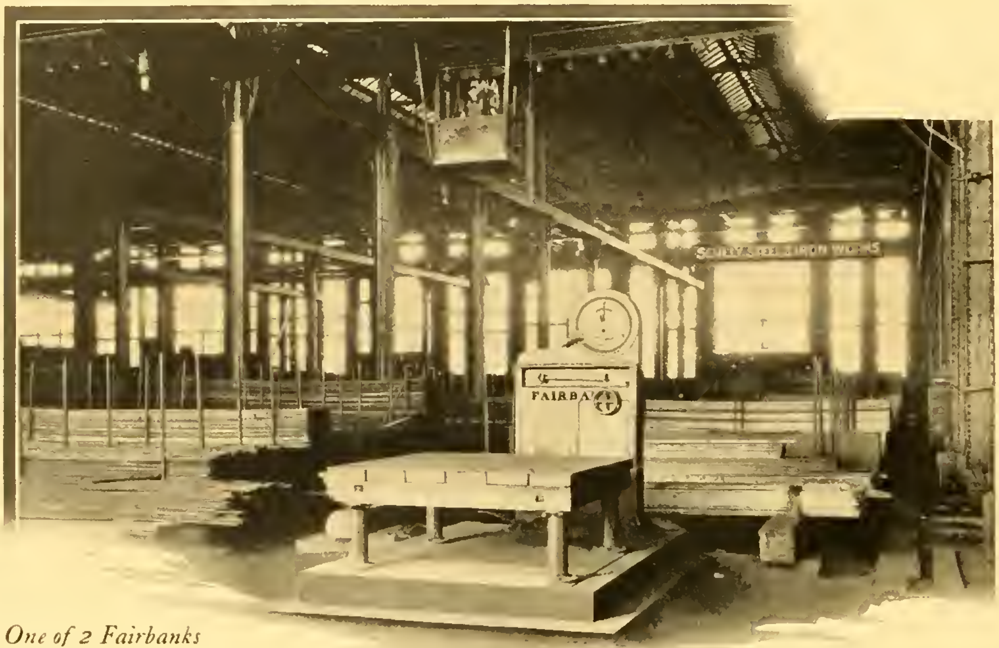
Code No.	Code Word	Capacity	Platform
10087	Nonplus	10,000 lbs.	6 ft. 0 in. x 4 ft. 6 in.

Self-contained, All Metal, Suspended Platform Scale with Spider and Removable Platform

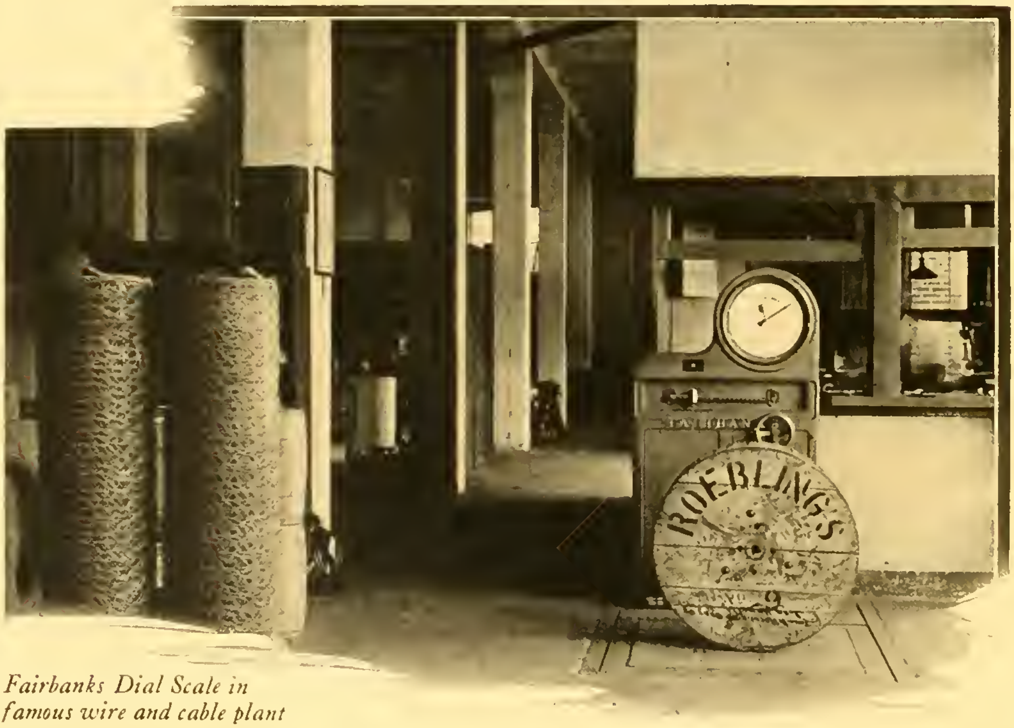
Code No.	Code Word	Capacity	Platform
10694	Occursion	5,000 lbs.	48 in. x 49 in.
10695	Ocean	3,500 lbs.	42 in. x 44 in.
10696	Oceanic	2,500 lbs.	47 in. x 37 in.

Note.—In the platform sizes above, the first figure is the dimension parallel with the beam.

Fairbanks Dial Scales in Successful Service



One of 2 Fairbanks Dial Scales in steel and iron works



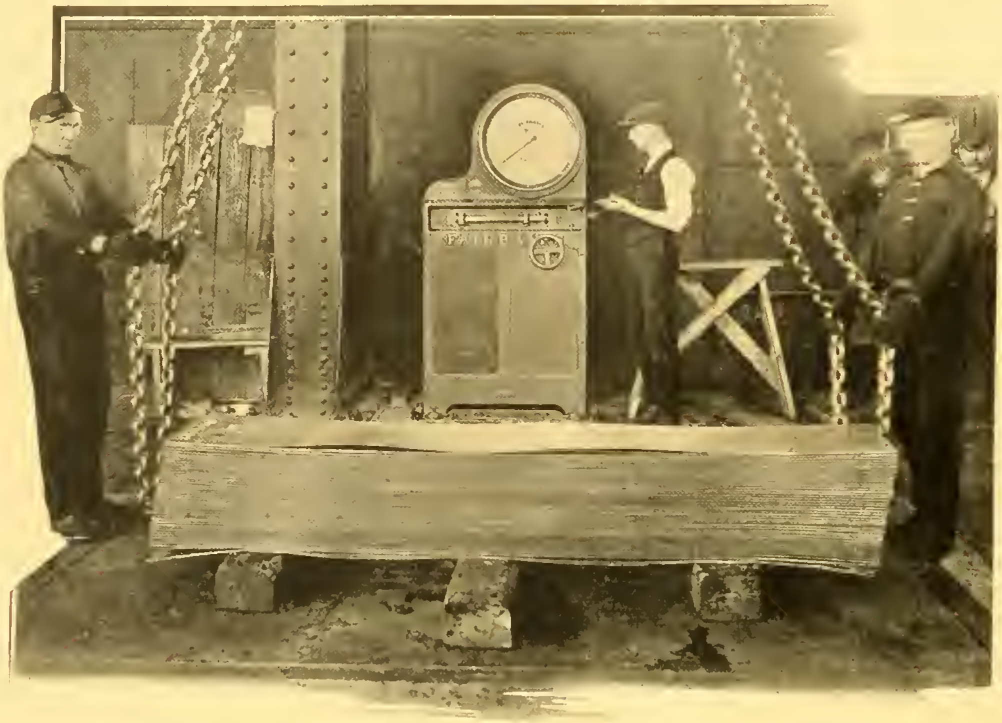
Fairbanks Dial Scale in famous wire and cable plant

Fairbanks Dial Scales in Successful Service

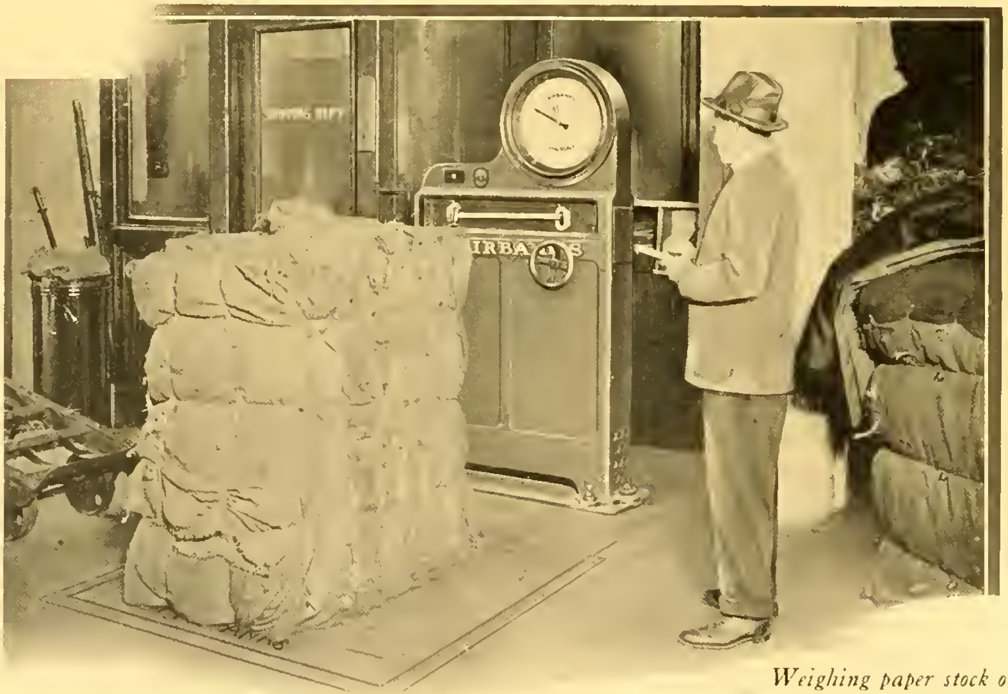
A row of Fairbanks Dial Scales in railroad freight house. Twelve Fairbanks Dial Scales in service here

Fairbanks Dial Scale in plant of one of the large tobacco companies

Fairbanks Dial Scales in Successful Service



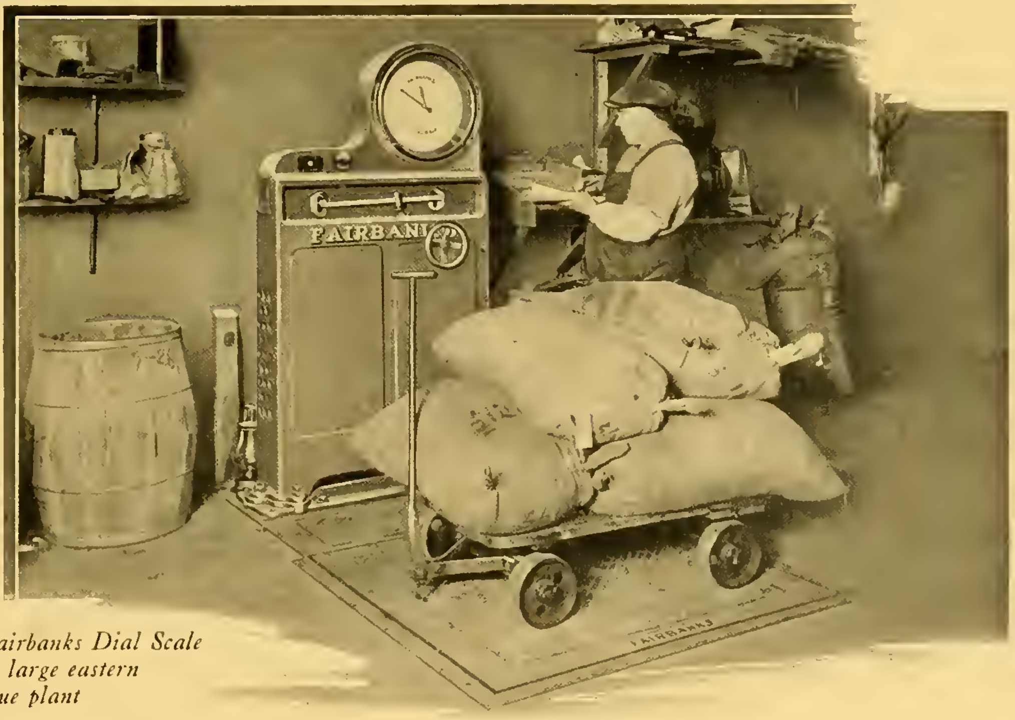
Fairbanks Dial Scale weighing sheet metal in plant of large steel company, having 8 Fairbanks Dial Scales in service



Weighing paper stock on Fairbanks Dial Scale in large warehouse.

Fairbanks Dial Scales in Successful Service

A line of Fairbanks Dial Scales in freight station of one of country's largest railroad systems, which uses altogether 24 of these scales



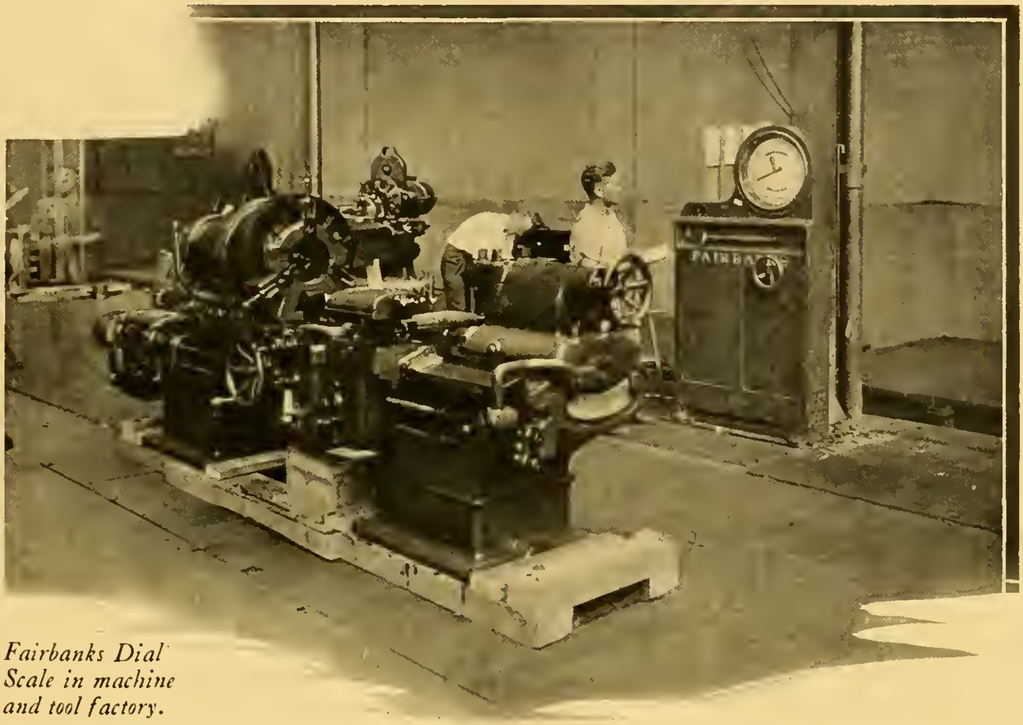
Fairbanks Dial Scale in large eastern glue plant

Fairbanks Dial Scales in Successful Service

Fairbanks Dial Scales in freight station of large railroad

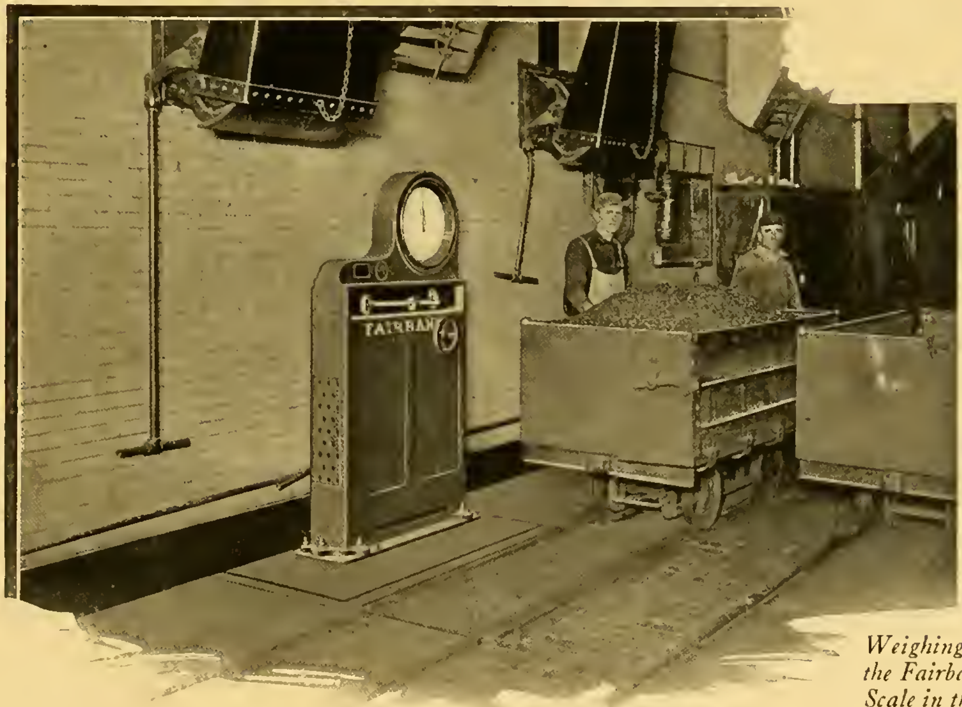
One of 6 Fairbanks Dial Scales in large middle west tea, coffee and spice plant

Fairbanks Dial Scales in Successful Service



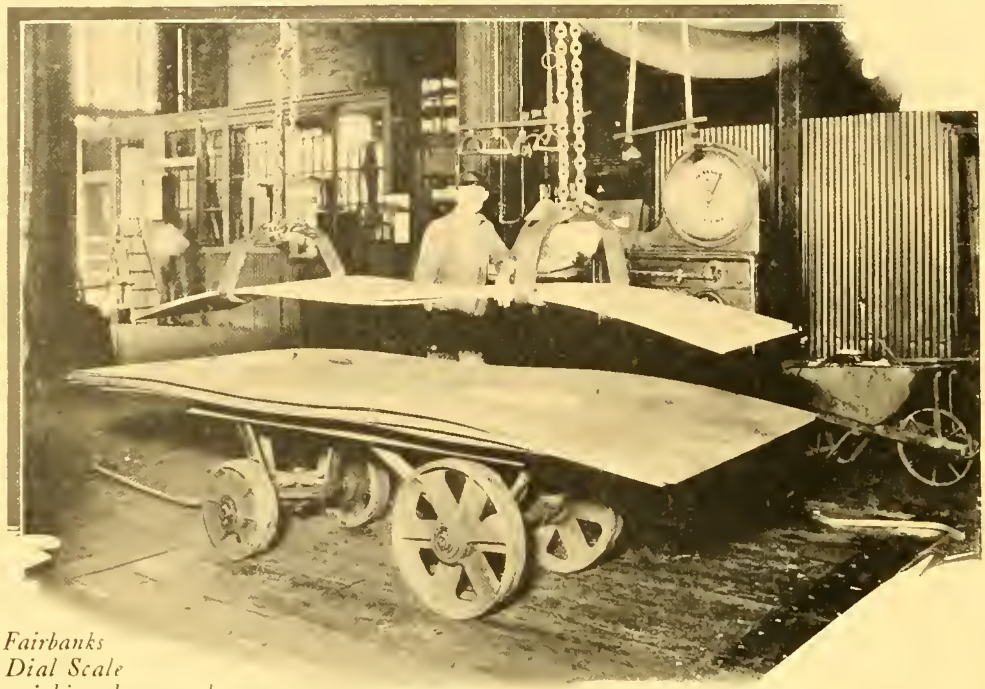
Fairbanks Dial Scale in machine and tool factory.

This plant has 3 Fairbanks Dial Scales.

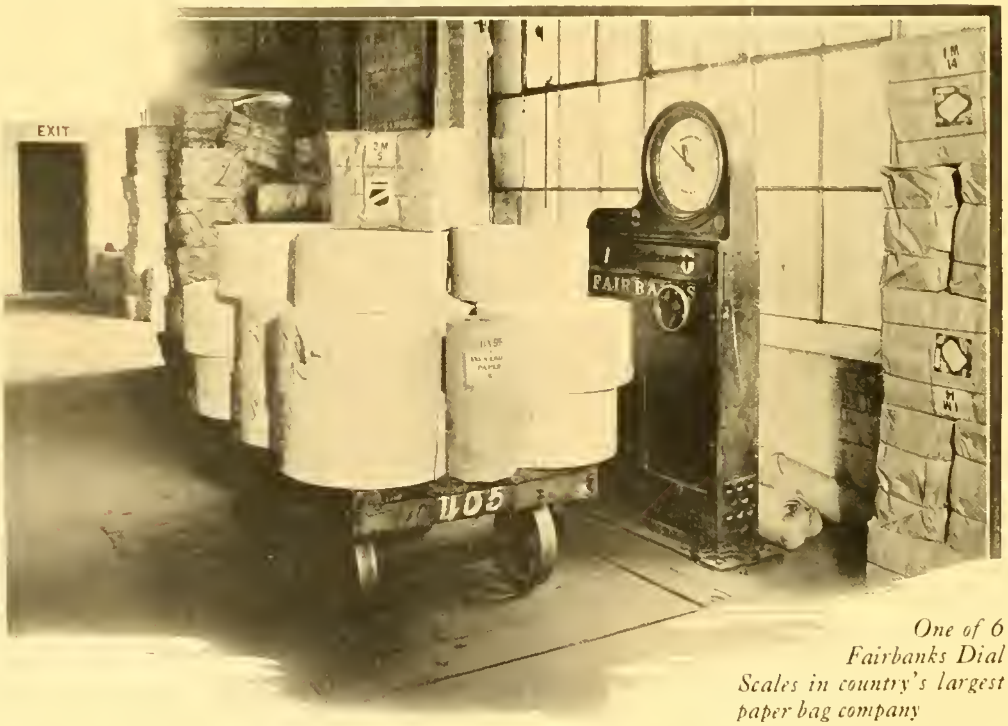


Weighing coal on the Fairbanks Dial Scale in the country's largest office building

Fairbanks Dial Scales in Successful Service

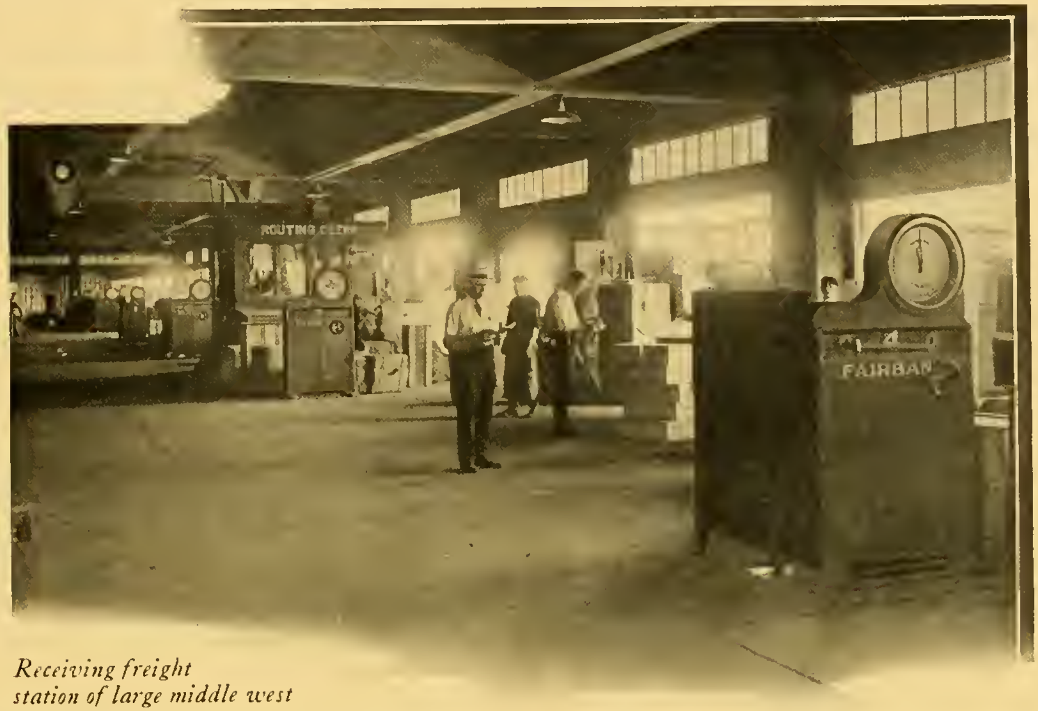


Fairbanks
Dial Scale
weighing sheet metal
in large middle west steel works

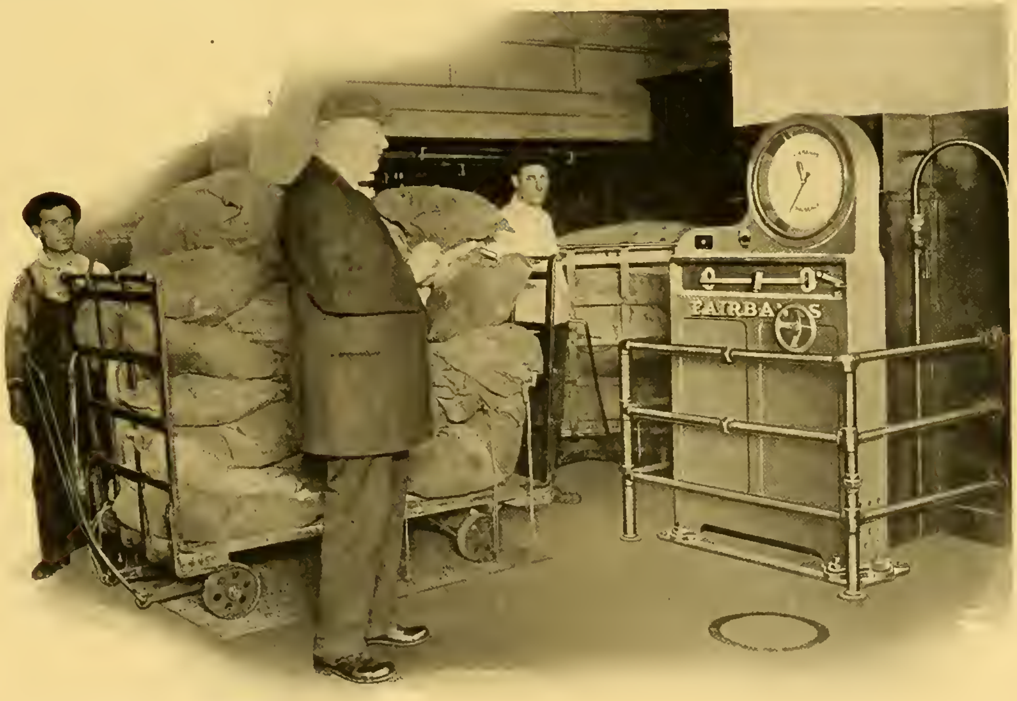


One of 6
Fairbanks Dial
Scales in country's largest
paper bag company

Fairbanks Dial Scales in Successful Service

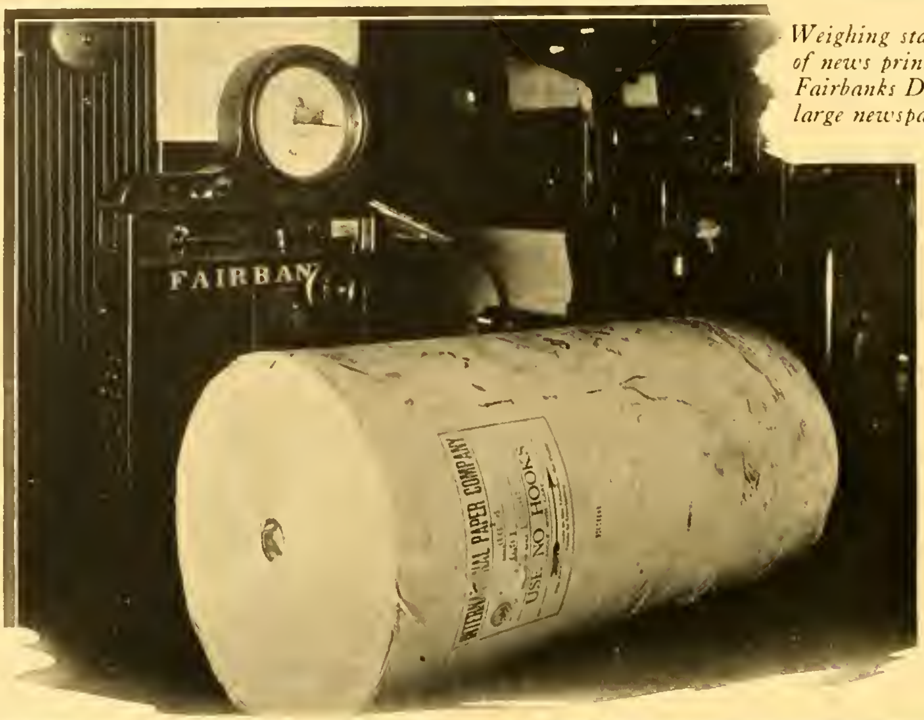


Receiving freight station of large middle west railroad, showing row of Fairbanks Dial Scales

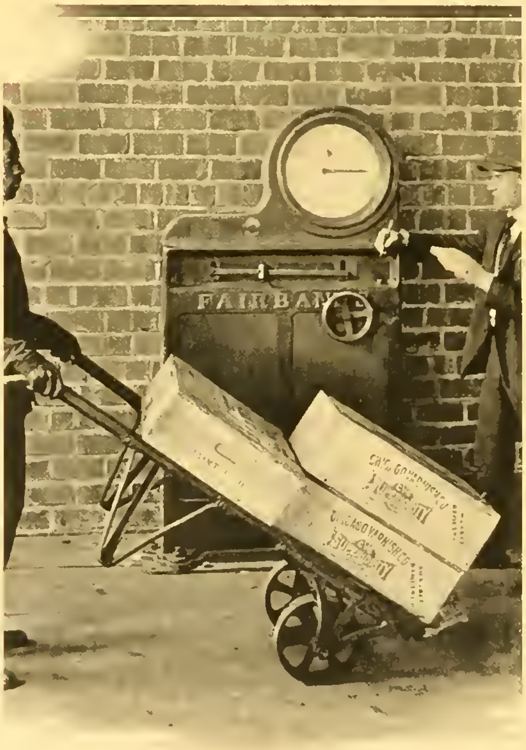


One of several Fairbanks Dial Scales used for weighing mail by a leading metropolitan newspaper

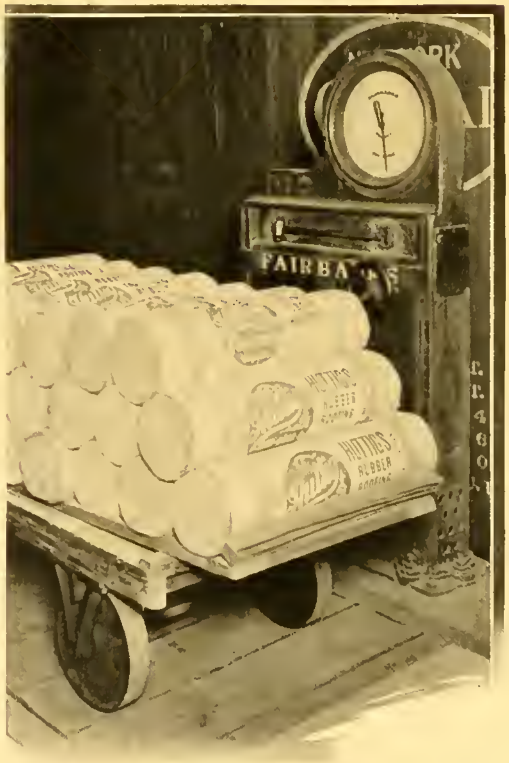
Fairbanks Dial Scales in Successful Service



Weighing standard roll of news print paper on Fairbanks Dial Scales in large newspaper plant

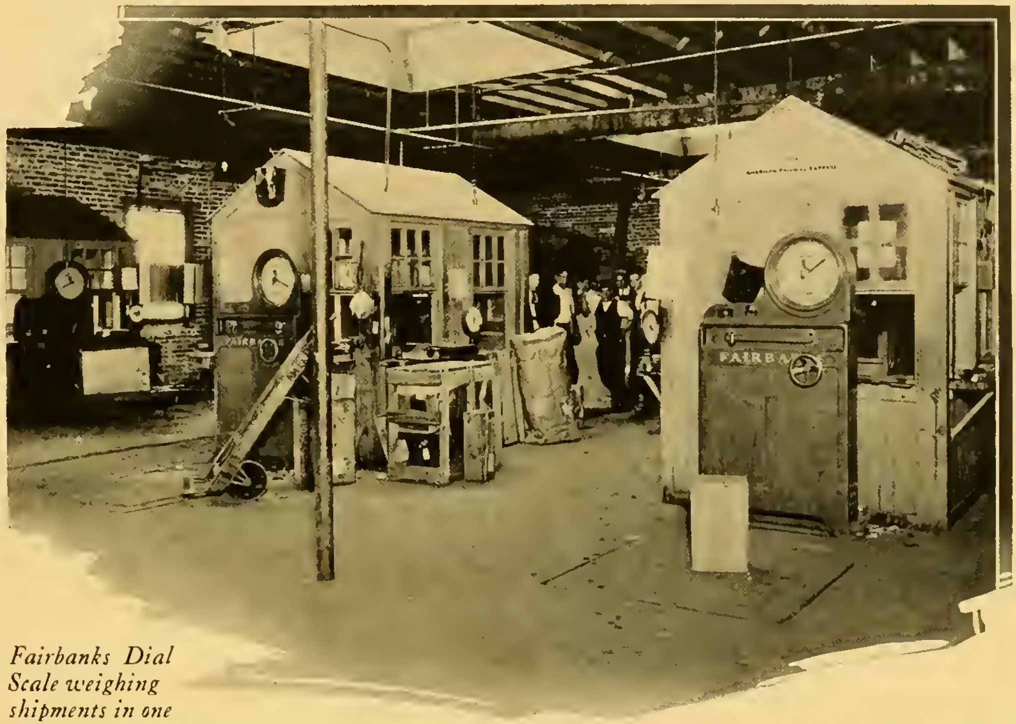


One of 25 Fairbanks Dial Scales in daily use in terminal warehouse of one of the largest railroad systems in the country

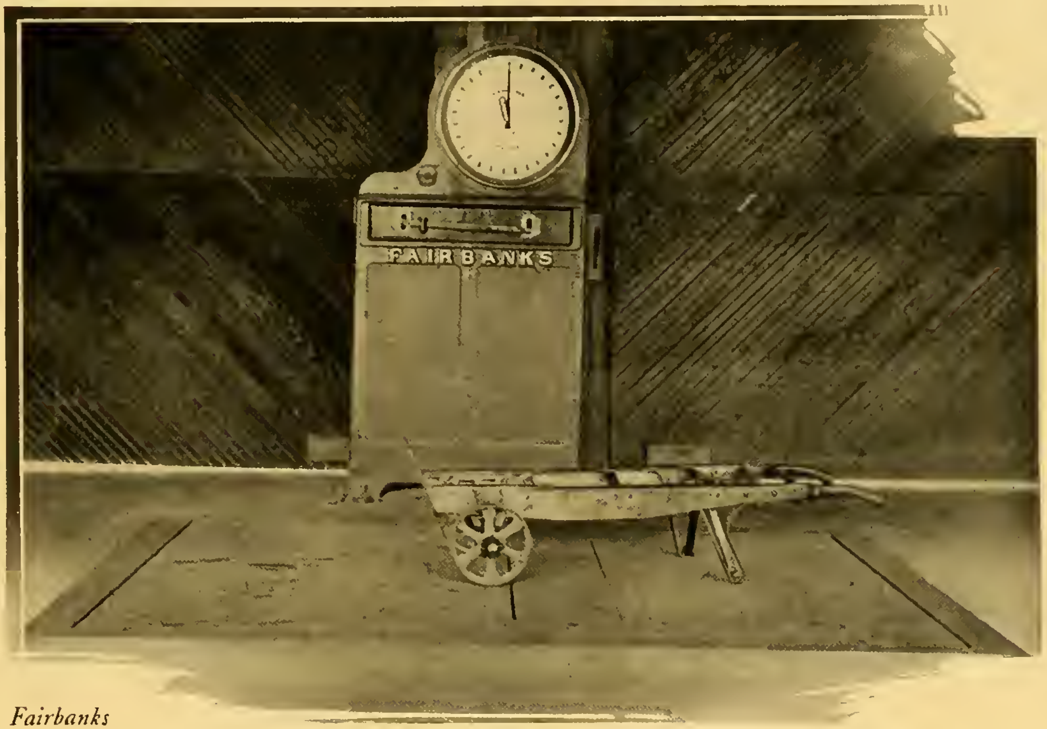


Fairbanks Dial Scale in sash and door plant

Fairbanks Dial Scales in Successful Service



Fairbanks Dial Scale weighing shipments in one of the depots of what is now the American Railway Express



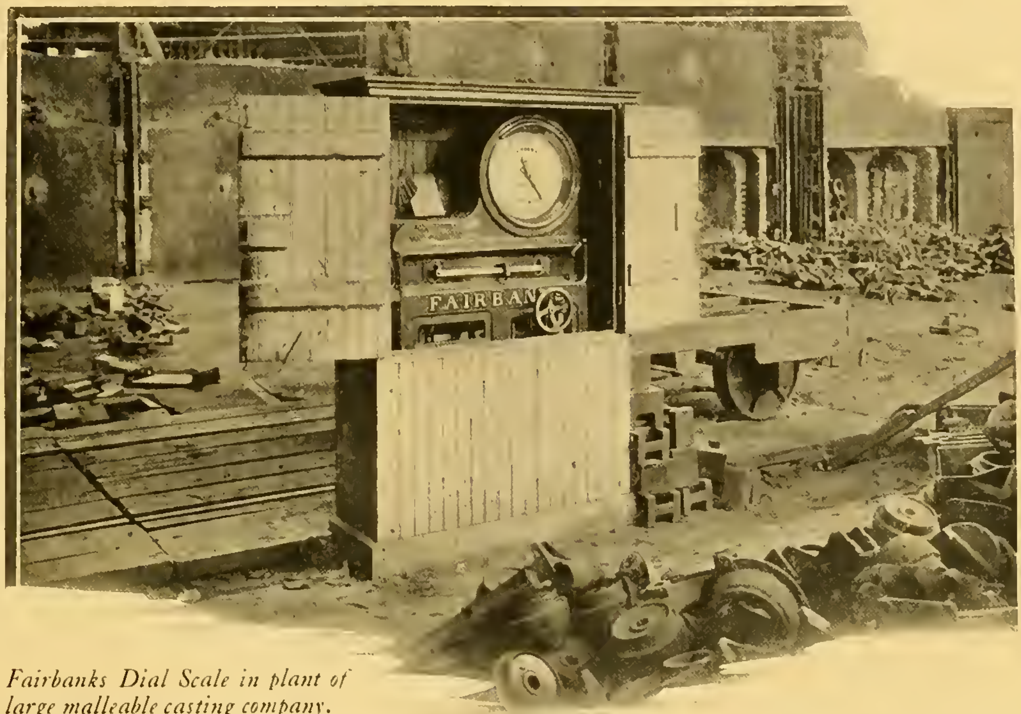
Fairbanks Dial Scale in freight shed of a large western railroad which uses a great many of these scales.

Fairbanks Dial Scales in Successful Service

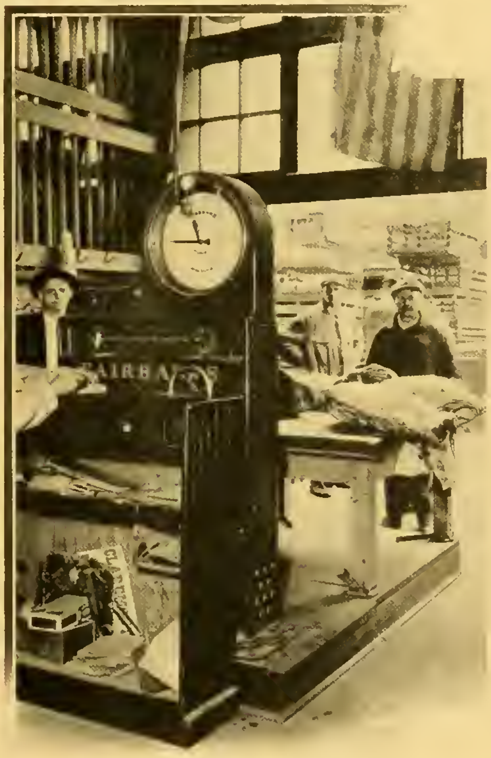
Part of 28 Fairbanks Dial Scales used by one of the large western railroads

Fairbanks Dial Scale in board and paper mill

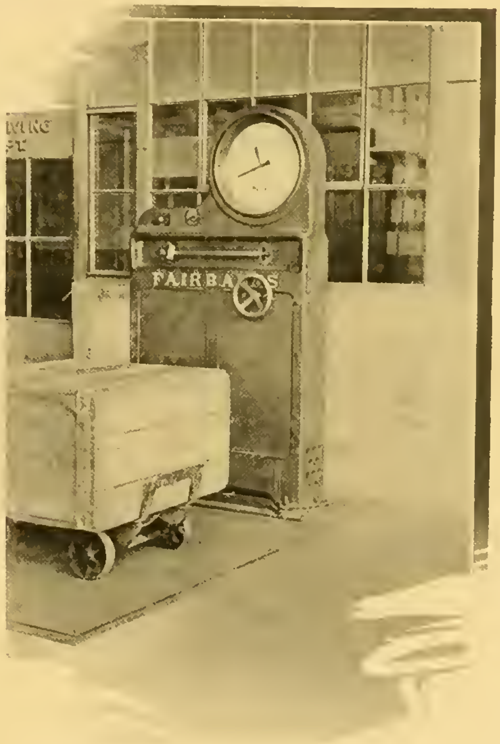
Fairbanks Dial Scales in Successful Service



Fairbanks Dial Scale in plant of large malleable casting company. There are three Fairbanks Dial Scales used at this plant



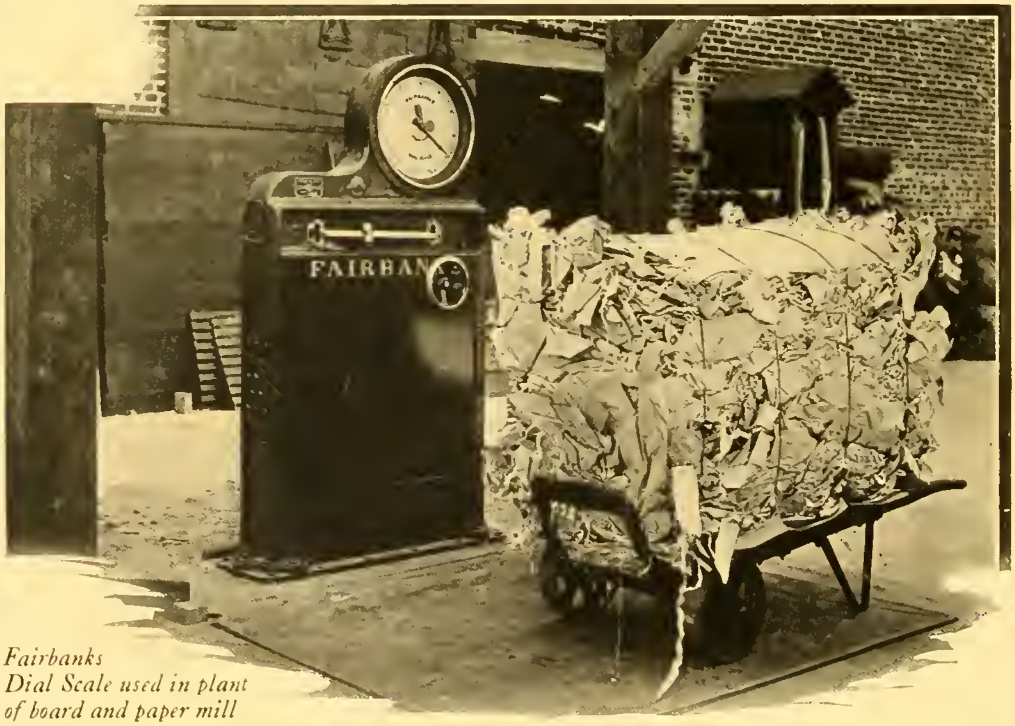
Fairbanks Dial Scale in market service—branch of large packing company



One of three Fairbanks Dial Scales in western plant of a national battery concern

Fairbanks Dial Scales in Successful Service

Fairbanks
Dial Scales in
freight house of western railroad



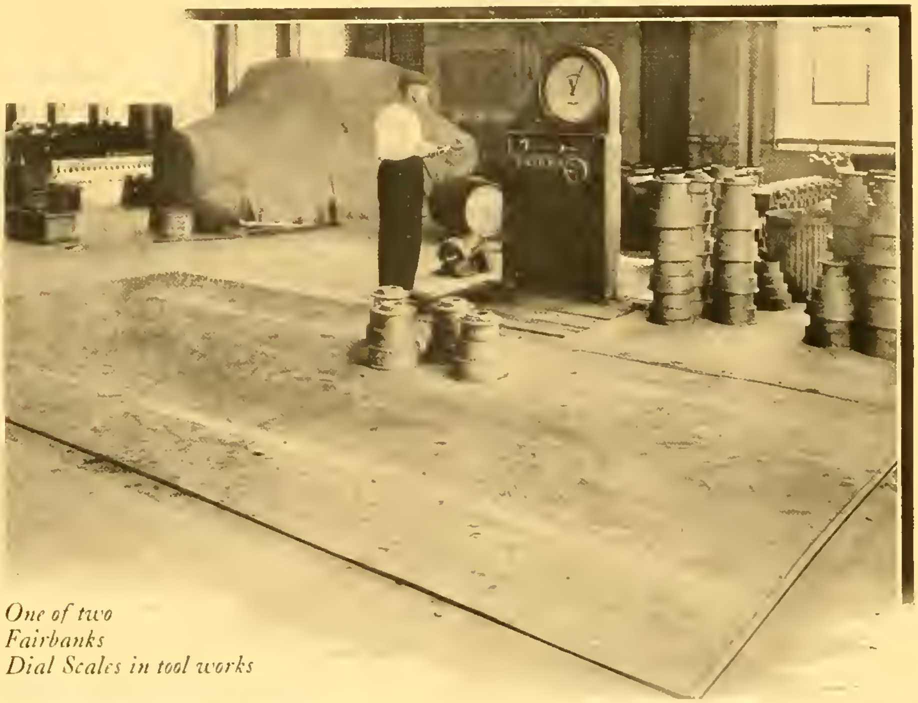
Fairbanks
Dial Scale used in plant
of board and paper mill

Fairbanks Dial Scales in Successful Service

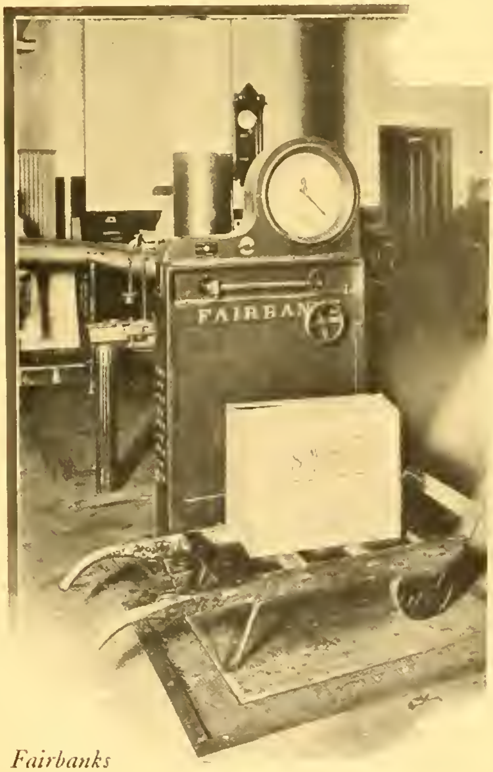
A well-known cotton oil corporation uses this Fairbanks Dial Scale

Fairbanks Dial Scale in shipping department of large wholesale grocery house

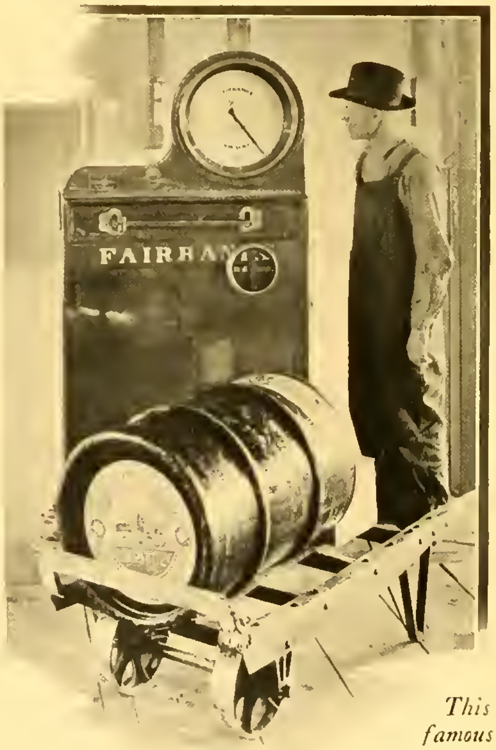
Fairbanks Dial Scales in Successful Service



One of two Fairbanks Dial Scales in tool works

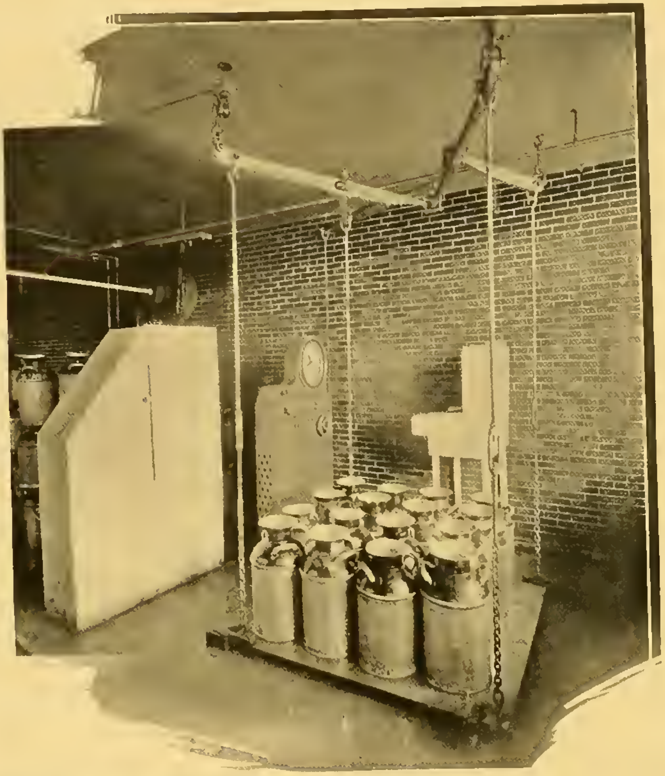


Fairbanks Dial Scale in dry goods establishment

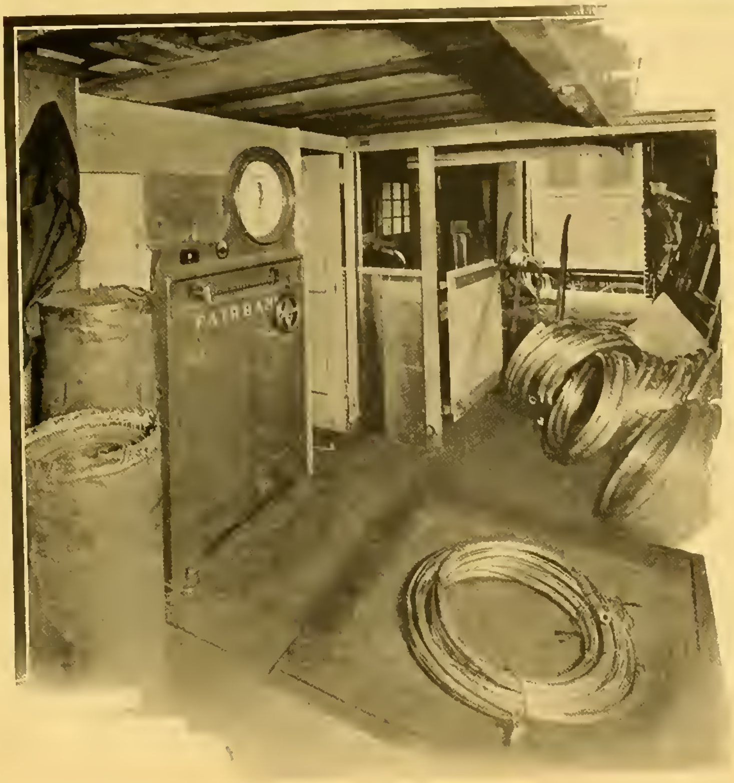


This famous oil corporation also uses the Fairbanks Dial Scale

Fairbanks Dial Scales in Successful Service

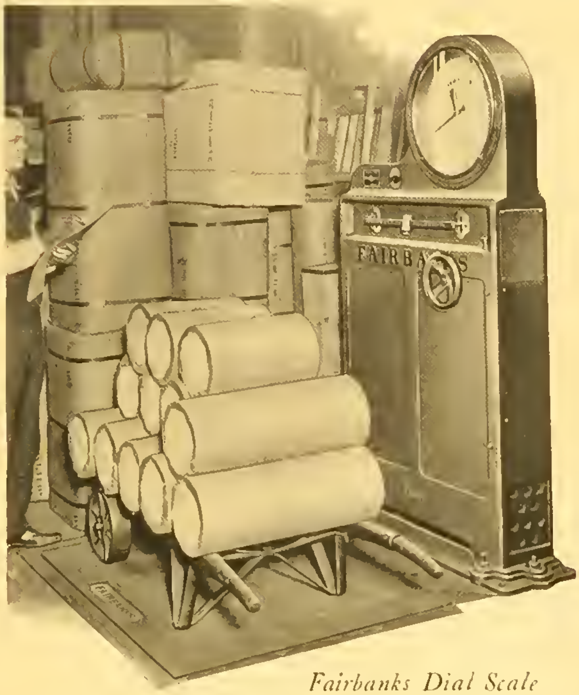


An interesting application of a Fairbanks Dial Scale used for weighing cans of milk in a western creamery. The sheet iron housing goes over the dial mechanism for protection against moisture



Fairbanks Dial Scale accurately weighing valuable metal in a large lead plant

Fairbanks Dial Scales in Successful Service



Fairbanks Dial Scale
in warehouse of eastern paper dealer

Fairbanks Dial Bundling Bench Scale

At left, a Fairbanks Self-Contained All-Metal Dial Scale. At right, a Fairbanks Dial to which are connected two Overhead Track (Abattoir) Scales

OF CONGRESS
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Fairbanks, Morse & Co.

(INCORPORATED)

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